CLAIMS

1.   A method to indicate the size of a mini cell in a mobile telephone communications system, wherein a cell size indicator is provided in the header of the mini cell, **characterized in**
5   **that** said cell length indicator is a short fixed length field which is non-linearly coded.

2.   A method in accordance with claim 1, **characterized in that** said cell size indicator comprises an extension bit provided in said fixed size length field, said extension bit,
10   if set, indicating that a further fixed size length field follows said fixed size length field in said header.

3.   A method in accordance with claim 1 **characterized in that** said length indicator comprises a predefined code which, if present, indicates that a further fixed size length field
15   follows said fixed size length field in said header.

4.   A method to indicate the size of a mini cell in a mobile telephone communications system **characterized in that** the mini cell length is indicated indirectly by the identity CID of the connection which is made up of the cells the size of which are
20   to be indicated.

5.   A method in accordance with claim 4 **characterized in that** said size is mapped on said connection identity CID during connection set up.

6.   A method in accordance with claim 5 **characterized in that**
25   a number of different cell sizes are mapped on a number of predefined connection identities during system initialization.

7.   A method in accordance with claim 6 **characterized in that** mini cell length is indicated indirectly by a group identifier (VP or VC) common to a number of different connections
30   extending along a common path.

8.   A method of indicating the length of a mini cell in accordance with claim 1 **characterized in that** the information

resident in the cell length indicator is mapped on cell sizes at memory locations of a memory in a mini cell header reading device, and that the cell length indicator is used as address to said cell size.

5   9.   A method of indicating the length of a mini cell in accordance with claim 6 **characterized in that** the connection identity CID is mapped on cell size at memory locations of a memory in a mini cell header reading device, and that the cell length indicator is used as address to said cell size.

10   10.   A method of indicating the size of a mini cell which comprises a header and a payload, said header comprising a length field (23), LEN field, comprising a first number of bits used to indicate the size of the mini cell **characterized in that** said header comprises a length extension qualifier

15   field (25), LEQ field, having a predefined second number of bits used as length extension code for extending the length field (23) and for extending the header (21) of said mini cell as well as for extending the payload of the mini cell.

11.   A method in accordance with claim 10 **characterized in that** said bits of said LEQ field are defining a first set of

20   code values, which when present is said LEQ field are appended to said first number of bits in the LEN field so as to indicate the size of the payload of said mini cell using a linear coding scheme.

25   12.   A method in accordance with claim 11, **characterized in that** to each code value of said first set there are associated 2^N different values, where N equals said second number of bits.

13.   A method in accordance with claim 12 **characterized in that** said bits of said LEQ field (27) define a second a second

30   code value, different from said first set of code values, said second code value when present in the LEQ field indicates that the header of the mini cell is extended with a further header (28), comprising a further length field (29) and that said

length field (23) is replaced with an extension qualifier field (27), EXQ field, which is used to extend said further length field of said mini cell.

14. A method in accordance with claim 13 **characterized by** said EXQ field comprises said first number of bits and that said further LEN field comprises a third number of bits.

15. A method in accordance with claim 14 **characterized in that** a sub set of bits of said EXQ field are used as extension code appended to said third number of bits of said further LEN field (29) so as to increase the number of sizes available for said mini cell.

16. A method in accordance with claim 15 **characterized in that** to each extension code there is associated 2^M different length values, where M is the number of bits of said further length field (29).

17. A method in accordance with claim 16 **characterized in that** said EXQ field comprises a cell type code which when present in the header of the mini cell indicates that the cell is an operation and maintenance cell comprising a header (32) and a payload (33) comprising operation and maintenance information.

18. A cell header reading device for extracting, from a user data channel the user data part of an individual connection, comprising a shift register into which the bit stream of the user data channel is shifted in synchronism with clock pulses, a first counter counting the size of a cell size indicating field in the header of the mini cell shifted into the shift register in synchronism with said clock pulses, a latch register connected to the first counter and to the shift register to latch the information resident in the cell size indicating field as counted by the first counter, a memory connected to said latch register, a second counter connected to the latch register and the memory for controlling a